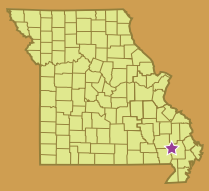
Mingo Basin

Conservation Opportunity Area



Mississippi River Alluvial Basin

Mingo National Wildlife Refuge conserves some of Missouri's last remaining cypress-tupelo swamps.

Vergial Harp, U.S. Fish and Wildlife Service

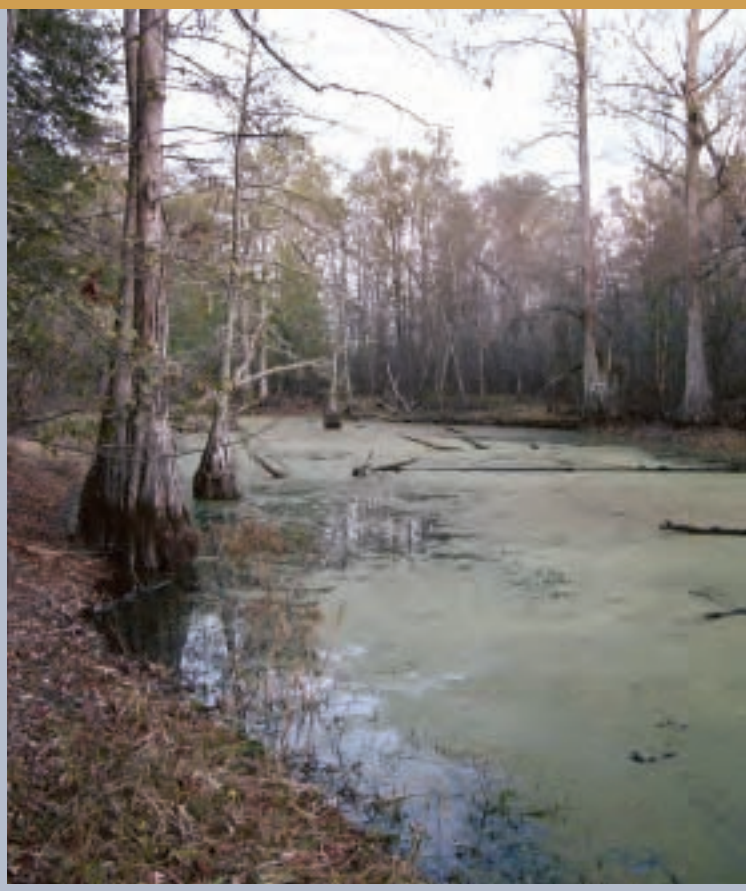
The Mingo Basin formed 18,000 years ago when the Mississippi River shifted east, leaving a dense swamp in the abandoned river channel. Today the basin includes backwater sloughs, marshes, open water, bottomland forests, cypress-tupelo swamps, shrub swamps, upland woodlands and agricultural land. Mingo National Wildlife Refuge and Duck Creek Conservation Area (17,000 acres combined) conserve the largest remaining tract of bottomland forest in Missouri's Bootheel region.

Vast bottomland forests and swamps once covered 2.5 million acres of the Bootheel. Attempts to harvest the timber and drain the swampland were largely successful by the 1970s. Most of the region was converted to cropland, but a few hard-to-drain locations retain wetland habitat. The Mingo Basin lies in a low-lying pocket between the Ozark Highlands and Crowley's Ridge and is blocked on both ends by natural levees of the St. Francis River and Castor River. Mingo Swamp was heavily logged and grazed in the early 20th century, but efforts to drain it were unsuccessful.

The Mingo Basin Conservation Opportunity Area (COA) is a restored wetland complex that retains many plants and animals characteristic of big river bottomlands. It includes uplands in the adjacent Ozark Highlands and Crowley's Ridge.

Mingo Basin Conservation Strategies

- Restore natural hydrologic conditions where feasible.
- Improve the quality of bottomland hardwood forest, woodland, wetland and aquatic natural communities.
- Control invasive plants and animals.
- Introduce alligator gar to the aquatic system.
- Reduce stream sedimentation and soil erosion.
- Work cooperatively with local partnership groups and landowners to restore natural communities.



Vergial Harp, U.S. Fish and Wildlife Service

A swamp is a nearly continuously flooded wetland dominated by trees. Most of Missouri's remaining swamps are small remnants of a once vast complex of wetlands in the Bootheel region.

Priority Research and Inventory Needs

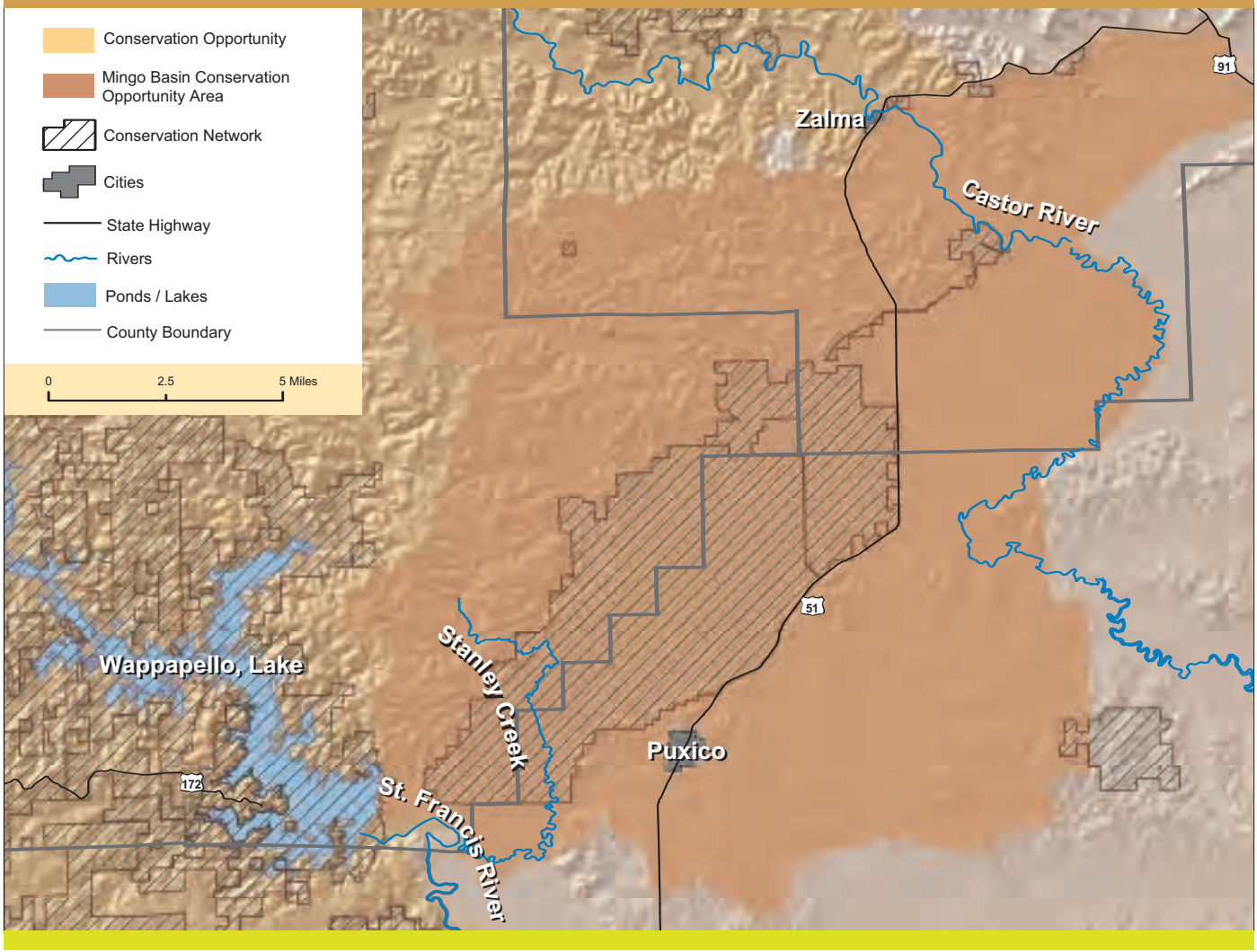
- Develop current and historic maps of Mingo Basin's hydrology and geomorphology.
- Identify natural processes and habitats for restoration.

Conservation Partners

Existing: Ducks Unlimited; Mingo Swamp Friends, Inc.; East Ozarks Audubon Society; University of Missouri's Gaylord Memorial Laboratory; U.S. Fish & Wildlife Service (USFWS); Missouri Department of Conservation (MDC)

Potential: The Nature Conservancy; National Wild Turkey Federation (NWTF); Missouri Conservation Heritage Foundation (MCHF); National Fish and Wildlife Foundation (NFWF); U.S. Army Corps of Engineers (USACE); Natural Resources Conservation Service (NRCS)

Mingo Basin Conservation Opportunity Area



Funding Sources

Existing: USFWS annual budget; USFWS Partners for Fish and Wildlife Program; USFWS Cooperative Conservation Initiative; USFWS Challenge Cost Share grant; MDC annual budget; Mingo Swamp Friends, Inc. fundraising; NRCS Wetland Reserve Program; Ducks Unlimited Conservation Projects Program; Gaylord Laboratory annual budget

***Green treefrogs** live in cypress swamps of southeastern Missouri.*

Jim Rathert, Missouri Department of Conservation

Promising Future Sources: MDC Landowner Incentive Program; MDC Wildlife Diversity Funds; NRCS Wetland Reserve Program; Farm Service Agency Conservation Reserve Program; Missouri Department of Natural Resources (DNR) Special Area Land Treatment Program; DNR 319 program; USFWS/U.S. Geological Survey Science Support Partnership Program; USGS Watershed Grant Program; Environmental Protection Agency Biological Support Grant; USACE Section 1135 Program; NFWF grants; NWTF Wild Turkey Super Fund; MCHF Stream Stewardship Trust Fund; USFWS North American Wetlands Conservation Act Grants

Existing Conservation Network

Mingo National Wildlife Refuge; Duck Creek Conservation Area; Dark Cypress Swamp Conservation Area; Sank Conservation Area; Clubb Creek Conservation Area; Crowley's Ridge Conservation Area; Maple Flats Access; Gipsy Towersite

Western Mud Snake

Jim Rathert, Missouri Department of Conservation

This shiny, iridescent snake lives in southeastern Missouri swamps. With the destruction of natural swamps throughout the Bootheel, the western mud snake is listed as a Missouri species of conservation concern. The Mingo Basin COA offers some of the best habitat for this snake and the aquatic salamanders (amphiumas and sirens) that it preys upon.

Conservation Challenges

The Mingo Basin Conservation Opportunity Area retains much of its historic floodplain wetlands. Potential obstacles to conservation success include intense farming within the Mingo Basin, lack of financial resources and personnel and a lack of understanding of wetlands by the public.

To learn more about the Mingo Basin Conservation Opportunity Area, please contact:

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